BMS

Bus Management System

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Table of Contents

- **Bus**

  Attributes: (PK) BusId, NoOfSeats, Region, DriverName, Plate.

- **Ticket**

  Attributes: (PK) TicketId, Price, StartDestination, ArrivalDestination, Availability, (FK) UserId, (FK) BusId.

- **User**

  Attributes: (PK) UserId, Name, Role.

Users

- Administrator: Has full access to all functionalities and can manage the system.

- Client: Has limited access to view and interact with their own information.

Actions

- Administrator

  o Insert Ticket: Add a new ticket to the database.

  o Update Bus Information: Modify the bus information.

  o Update Ticket Information: Modify the ticket information.

  o Delete Ticket: Remove a ticket record from the database.

  o Select All Buses: View all buses in the database.

  o Select All Tickets: View all tickets in the database.

- Client

  o Select All Available Tickets: View all available tickets in the database.

  o Select His/her Tickets: View their own ticket information.

  o Update Ticket's User Id and Availability for Booking: Update the ticket's user id to the user's id and set the ticket availability to unavailable.

  o Update Ticket's User Id and Availability for Canceling: Remove the user's id from the ticket's user id and set the ticket availability to available.

Entity Relationship Diagram (ERD)

Bus

PK	BusId
	NoOfSeats
	Region
	DriverName
	Plate

Ticket

PK	TicketId
	Price
	StartDestination
	ArrivalDestination
	Availability
FK	UserId
FK	BusId

User

PK	UserId
	Name
	Role

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